IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for depositing, on a substrate, a coating ~~based on~~ comprising a semiconductor material comprising a ~~materials based on~~ metal oxide ~~oxides~~, ~~which are~~ wherein the metal oxide initiates ~~capable~~, under ~~the effect of~~ radiation of a suitable wavelength, ~~of initiating~~ one or more radical reactions causing ~~the~~ oxidation of organic substances and thereby said coating has ~~so as to confer~~ photocatalytic properties ~~on said coating~~, the process comprising:

depositing the coating having ~~with~~ photocatalytic properties by chemical vapor deposition, wherein the reaction and the deposition are carried out at an atmospheric pressure and the deposition is carried out at a temperature below 300°C under an atmosphere comprising a gas mixture that comprises at least one of an organometallic precursor and a metal halide of said metal oxide, the deposition being enhanced by a plasma source.

Claim 2 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein at least one carrier gas or a mixture of carrier gases is selected from the group consisting of air, nitrogen, helium, and argon,

and the carrier gas or the mixture of carrier gases is injected parallel to the gas mixture ~~containing~~ comprising the precursor.

Claim 3 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein the gas mixture comprises an oxidizing agent or a mixture of oxidizing agents ~~is incorporated into the gas mixture~~.

Claim 4 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein the gas mixture comprises a reducing agent or a mixture of reducing agents ~~is incorporated into the gas mixture~~.

Claims 5-6 (Canceled).

Claim 7 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein at least one sublayer is deposited, prior to the deposition of the coating having ~~with~~ photocatalytic properties, thereby ~~making it possible~~ to impart another functionality to said coating having ~~with~~ photocatalytic properties and/or to reinforce said properties of said coating.

Claim 8 (Currently Amended): The process according to ~~as claimed in~~ claim 1, ~~which incorporates into~~ wherein the gas mixture comprises ~~comprising~~ at least one of the organometallic precursor and ~~and/or~~ a metal halide of said metal oxide that is at least one other type of mineral material.

Claim 9 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein the coating having ~~with~~ photocatalytic properties is deposited on the substrate within ~~the~~ an actual plasma discharge.

Claim 10 (Currently Amended): The process according to ~~as claimed in~~ claim 1, wherein the coating having ~~with~~ photocatalytic properties is deposited on the substrate outside [[the]]a plasma discharge.

Claim 11 (Currently Amended): A substrate comprising ~~based on~~ glass, ceramic, glass-ceramic or plastic, ~~provided on~~ wherein at least part of at least one face ~~of its faces~~ of the substrate comprising ~~with~~ a coating having ~~with~~ photocatalytic properties, wherein the substrate comprises ~~comprising~~:

at least partially crystallized titanium oxide, obtained by implementing the process ~~as claimed in~~ according to claim 1, wherein the crystallized titanium oxide is in anatase form, in rutile form, in brookite form, or in the form of a mixture of anatase, rutile and brookite.

Claim 12 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the crystallized titanium oxide is in the form of crystallites having ~~with~~ a mean size of between 0.5 and 60 nm.

Claim 13 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the coating comprises ~~also includes~~ a mineral material.

Claim 14 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the coating comprises an additive ~~includes additives~~ capable of extending the photocatalytic properties ~~effect~~ due to titanium oxide.

Claim 15 (Currently Amended): The substrate according to ~~as claimed in~~ claim 14, wherein ~~the~~ a crystal lattice of the titanium oxide is doped.

Claim 16 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein ~~the~~ a thickness of the coating is between 5 nm and 1 micron.

Claim 17 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein ~~the~~ a photocatalytic activity of the coating is at least 5×10^{-3} cm^{-1} min^{-1} measured by means of ~~the~~ a TAS test.

Claim 18 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein ~~the~~ a rms roughness of the photocatalytic coating is between 2 and 20 nm.

Claim 19 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein ~~the~~ a light reflection of the photocatalytic coating is less than 30%, with a neutral color.

Claim 20 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein ~~the~~ an absorption of the photocatalytic coating is less than 10%,.

Claim 21 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein at least one thin film having an antistatic, thermal or optical function, or forming a barrier to ~~the~~ migration of alkali metals coming from the substrate, is placed beneath the coating having ~~with~~ photocatalytic properties.

Claim 22 (Currently Amended): The substrate according to ~~as claimed in~~ claim 21, wherein the thin film having an antistatic function, ~~possibly with~~ and optionally at least one of controlled polarization, ~~and/or having~~ a thermal function ~~and/or~~ and an optical function ~~is based on~~ comprises a conductive material of the metal type or of the doped metal oxide type.

Claim 23 (Currently Amended): The substrate according to ~~as claimed in~~ claim 21, wherein the thin film having an optical function comprises ~~is based on~~ an oxide or a mixture of oxides, ~~the~~ a refractive index of which is intermediate between ~~that~~ the refractive index of the coating and ~~that~~ the refractive index of the substrate, ~~especially that (or those) chosen from the following oxides:~~ wherein the oxide comprises Al_2O_3, SnO_2, ~~and~~ In_2O_3, ~~or based on~~ silicon oxycarbide, ~~or~~ silicon oxynitride, or mixed oxides comprising ~~based on~~ a mixture of a material of high refractive index with a material of low refractive index.

Claim 24 (Currently Amended): The substrate according to ~~as claimed in~~ claim 21, wherein the thin film having an alkali-metal barrier function comprises ~~is based on~~ a silicon oxide, nitride, oxynitride or oxycarbide, $F:Al_2O_3$, aluminum nitride, SnO_2 or silicon nitride.

Claim 25 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the substrate is transparent, flat, or curved.

Claim 26 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the substrate is a glass substrate.

Claim 27 (Currently Amended): The substrate according to ~~as claimed in~~ claim 11, wherein the substrate is a substrate comprising ~~based on~~ a polymer, PMMA, polycarbonate, or PEN.

Claim 28 (Currently Amended): An antisoiling and/or antifogging, monolithic, multiple or laminated glazing assembly[[;]], wherein the assembly comprises the substrate according to Claim 11. ~~comprising:~~

~~a substrate as claimed in claim 11,~~

~~for the manufacture of glazing having properties of self-cleaning, antifogging and/or antisoiling, as regards organic and/or mineral soiling, for building windows of the double-glazing type, vehicle windows of the windshield, rear window or side-window type for automobiles, trains and aircraft, or utilitarian glazing, including glass for an aquarium, for shop windows, for a greenhouse, for interior furnishing, for urban furniture, or mirrors, television screens, or glazing with electrically controlled variable absorption, or photovoltaic cells.~~

Claim 29 (Currently Amended): The process according to ~~of~~ claim 1, wherein the metal oxide is titanium oxide.

Claim 30 (Canceled).

Claim 31 (Currently Amended): A method for manufacturing a laminated assembly, ~~the method~~ comprising[[:]] incorporating a substrate according to ~~as claimed in~~ claim 11.

DISCUSSION OF THE CLAIMS

Support for amended Claim 1 is found in previously presented Claims 1, 6 and 30 and at specification page 14, lines 13-19.

Claims 2-31 have been amended to place the claims in a better format for examination on the merits.

Claims 5-6 and 30 have been canceled.

No new matter has been added.